

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008934**Date Inspected:** 02-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BE/5CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as BP11A-001-043 to 054. The welder is identified as #220068 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP523B-001-070 to 065. The welder is identified as #053609 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F.

Bolted splice plates

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a plug weld joint. Plug welding is

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being performed on mis-drilled bolt holes. The welder is identified as #220066 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-FCAW-1G (1F)-repair-mis-drilled hole. Repair work was been done following CWR 671.

Segment 1AAW

This QA Inspector observed the removal of temporary tack welds by grinding. The tack welds were attaching the bolt hole template for the traveler rail bracket to the side plate, counter weight side.

Segment 5BE/5CE

This QA Inspector observed the removal of fit up plates along the side plate transverse CJP splice with the use of a cutting torch, cross beam side. The fit up plates were used for alignment of the side plates of the 2 joining segments.

Segment 1BW

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) on repairs of hold back welds on side plate stiffeners, counter weight side.

Segment 5AE

This QA Inspector observed the fit up of the bike path cantilever, the cantilever was sent in place with the use of a crane.

Segment 3BW

This QA Inspector observed SMAW repair welding had been done on the side plate stiffener hold back welds at areas MT indications were found and removed by grinding. Repair work was done on the cross beam and counter weight side.

Segment 2AW

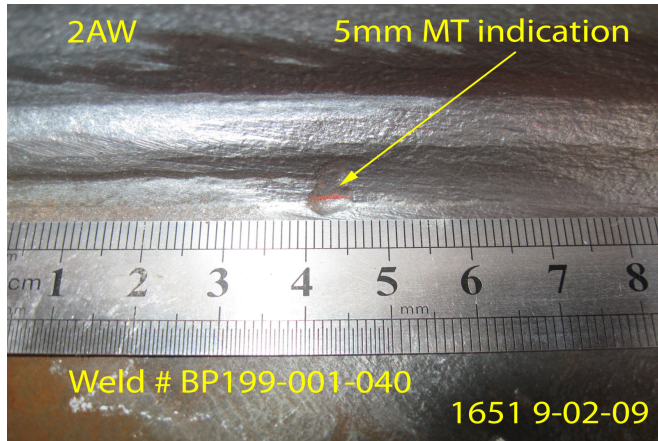
During random verification Magnetic Particle Testing (MT) on stiffener plate hold back weld BP199-001-040 this QA Inspector discovered a longitudinal linear indication. The MT indication is approximately 5mm in length. The hold back welds were submitted by ZPMC on document number 004127 2AW Hold Back Tag #1. MT had been previously performed and accepted by ZPMC MT personnel. An incident report was written for this indication.

ZPMC Quality Control (QC) Inspector is identified as Chen Bo and Feng Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By: Hernandez,Dan

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer